CORE
Metadata, citation and similar papers at core.ac.uk
Provided by Elsevier - Publisher Connector

Methods: A retrospective review was performed. Preoperative and postoperative renal function was assessed by creatinine levels and estimated glomerular filtration rate calculated by the Chronic Kidney Disease Epidemiology Collaboration equation. Renal dysfunction was defined as acute kidney injury, which is defined as any postoperative rise in creatinine levels of >44.2 μmol/L from the preoperative value, and the requirement of hemodialysis in patients who did not require dialysis preoperatively.

Results: During the study period, 287 patients were analyzed; 82 (29%) had OR and 205 (71%) had standard EVAR. Most of the patients were men, with 80.5% in the OR group and 84% in the EVAR group. A postoperative creatinine increase was observed during the follow-up in 14.6% of ORs and 4.4% of EVARs. Two patients, one each from the OR and EVAR group, required permanent dialysis. No patients required temporary dialysis. The mean iodinated contrast volume used in the EVARs was 134.3 ± 60.2 mL. The clamp position in the OR group was infrarenal in 65.9%, above one renal artery in 14.6%, above two renal arteries in 15.9%, and supraceliac in 3.7%. The renal/visceral ischemic time was 8.5 ± 16.1 min.

Conclusions: After open or endovascular aortic intervention, there is significant percentage of patients with a decline in renal function. This is more common in the OR group. The risk of renal impairment after aortic intervention should be recognized and strategies used to minimize its incidence.

Author Disclosures: A. Elzahabi: Nothing to disclose. **N. Eisenberg:** Nothing to disclose. **G. Roche-Nagle:** Consultant, Cook, Cordis, Vascutek.

An Analysis of Vascular Surgeons' Use of a Maintenance of Certification Program and Lessons for Future Engagement

Elizabeth M. Wooster,[1] Douglas L. Wooster[2]. [1]Higher Education, OISE/University of Toronto, Toronto, Ontario, Canada; [2]Division of Vascular Surgery, Department of Surgery, University of Toronto, Toronto, Ontario, Canada

Objectives: The Royal College of Physicians and Surgeons of Canada introduced a compulsory Maintenance of Certification (MOC) program in 2000 based on a 5-year cycle for all specialists. Modifications to the framework and credit system were introduced in 2010; the program is now in the third cycle. The aims of this study were to identify patterns of MOC use, compare medical with surgical specialties, and identify opportunities for improved MOC strategies.

Methods: The 2010-2012 database was compared with 2009 data to identify general trends. Side-to-side comparisons were done in the 2012 database to identify variations in MOC practice across the specialties of anesthesia, general surgery (GS), gastroenterology (GI), cardiac surgery (CS), cardiology (C), orthopedic surgery (OS), and vascular surgery (VS).

Results: Overall participation rates remained at 85% to 91% across specialties and in the different cycles. The overall use of group learning activities (93%), self-learning (85%), and self-assessment (30%) showed no change across cycles or specialties. Specific activities varied in different specialties: conferences (CS 70% to GI 85%), rounds (OS 38% to GI 55%), personal learning projects (OS 33% to GI 50%), patient safety panels (C 13% to GI 22%), Internet search (VS 12% to C 22%), and practice audits (VS 12% to GI 22%). There were no differences in journal reading (38%-41%) or self-assessment program use (2%-5%). Overall, despite specialty differences, traditional group MOC activities continue to represent the majority of credits reported; patient safety, self-assessment program use, practice audits, and internet-based activities were underrepresented.

Conclusions: Specialist MOC continues in traditional activities. There are variations by specialty. Resource-intensive self-learning and practice-assessment activities are not widely used. Strategies to modify program planning, participant orientation, and MOC expectations are required to increase uptake in certain, potentially high-value MOC activities.

Author Disclosures: E. Wooster: Nothing to disclose. **D. Wooster:** Nothing to disclose.

Future Demands for Vascular Care: A Census-Based Analysis

Douglas Wooster,[1] Elizabeth Wooster[2]. [1]Department of Surgery, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada; [2]Leadership, Higher and Adult Education, OISE/University of Toronto, Toronto, Ontario, Canada

Objectives: Changing population size and distribution, incidence of disease and risk factors, and the likelihood of need for care partly determines the demands for health care in the future. The introduction of advanced technology, patient and society's expectations, the growing at-risk population, and increased recognition of risk factors have impacted on vascular disease management. Studies in many countries predict a dramatic increase in the need for care for vascular issues. A "business as usual" model predicts a large increase in the medical manpower requirements to meet this. The aims of this study were (1) to identify the population size, (2) link population to vascular disease data, and (3) link disease data to resource requirements.

Methods: Population data regarding size and distribution of disease was sourced from StatsCan 2012 census data. The epidemiology of vascular risk factors, recognized disease, and determinants for intervention was sourced from a variety of academic sources. Resource requirements were inferred from the data, with sensitivity analysis applied to variable assumptions. Subgroup selection was applied for Ontario.

Results: Canada's population is approximately 36 million; Ontario's population is 12.8 million. The population is growing at 5.8%. The vascular target population of patients aged 55 to 80 years is growing more rapidly. The subgroups in Ontario by 5-year cadres range from 375.000 to 850,000, with a total of 3.2 million. The prevalence of risk factors ranges from 17% to 52%; the need for care ranges from 8% to 32%. Assuming a ratio for vascular specialists (VS) of 1:100-180,000, Ontario would need 71 to 126 VS on an on-going basis. Diagnostic and interventional resources will increase by 22% to 52% over time.

Conclusions: Increasing population, population at risk, disease prevalence, and triggers for intervention will lead to dramatic increases in vascular-related resources. Changes in VS scope of practice, involvement of other specialties, and nonphysician practitioners and changing technology will all affect assumptions regarding manpower and other resources for the care of vascular patients.

Author Disclosures: D. Wooster: Nothing to disclose. **E. Wooster:** Nothing to disclose.

Residency Training in Venous Disease Management Fails to Address Practice Needs

Douglas Wooster, Elizabeth Wooster, Michael Clemente. University of Toronto and Western University, Toronto, Ontario, Canada

Objectives: Previous surveys have shown that 91% of Canadian vascular surgeons maintain a venous management component in their practice; 53% have seen an increasing demand over the past 5 years. The spectrum of venous disease that is treated is wide, and vascular surgeons recognize only a limited group of fellow specialists as expert venous practitioners (41%). The aim of this study was to compare training objectives and practice requirements to training experiences in venous disease management in Canadian vascular training programs.

Methods: The curriculum objectives were collected from the Royal College training guidelines and individual program outlines. A survey of trainees and practicing vascular surgeons was done to assess the training opportunities and practice parameters relevant to venous management.

Results: Program objectives include training in venous disease management. However, most programs do not have specific venous rotations or access to dedicated venous centers. Trainees are seldom exposed to patients with venous issues in the clinic, emergency care, or rounds, nor do they attend major venous meetings. Ministry of Health and Long-Term Care have further limited opportunities in Ontario-based programs. Training correlates with practice better for conservative management (78%) than specific management (sclerotherapy, 50%; foam sclerotherapy, 42%; ambulatory phlebectomy, 55%; endovenous ablation, 50%). Thrombolysis training approximates practice (75%-100%) but inferior vena cava filter placement (34%) and venous angioplasty (22%) do not.

Conclusions: Despite the importance of venous management in practice and its inclusion in the training curricula, training generally fails to address most venous management issues and meet practice needs.

Author Disclosures: D. Wooster: Nothing to disclose. **E. Wooster:** Nothing to disclose. **M. Clemente:** Nothing to disclose.

Fibrinogen Level and Bleeding Risk During Catheter-Directed Thrombolysis Using Tissue Plasminogen Activator

Kevin Lee, Alexandra Istl, Luc Dubois, Guy DeRose, Thomas L. Forbes, Stewart Kribs, Amol Mujoomdar, Daniele Wiseman, Adam H. Power. Divisions of Vascular Surgery and Interventional Radiology, London Health Sciences Centre and Western University, London, Ontario, Canada

Objectives: Our objective was to evaluate if low fibrinogen levels during catheter-directed thrombolysis is associated with an increased risk of bleeding.